

## REMARKS

The following remarks are being submitted as a full and complete response to the Office Action dated April 8, 2008. In view of the amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to all outstanding rejections and/or objections, that they be withdrawn, and to indicate the allowability of the claims, and to pass this case to issue.

### Status of the Claims

Claims 1-15 and 21-27 are under consideration in this application. Claims 1 and 12 are being amended as supported on page 30, lines 12-20 to correct formal errors and to more particularly point out and distinctly claim the subject invention. Claims 21-27 are being added. The relevant supports may be found in the specification at page 11, line 22 - page 12, line 12, at page 12, lines 13 - 22, at page 13, lines 10 - 24, and at page 29, lines 4 - 15; at page 11, line 22 - page 12, at page 15, lines 19 - 26, and Preparation Examples 1-4; at page 18, line 13 - page 19, line 15; and at page 24, line 27 - page 25, line 15, and Preparation Examples 5-7. All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

### Prior Art Rejections

Claims 1-15 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Obha et al. (US 6,605,344) in view of Matsuo et al. (US 6,699,830). This rejection has been carefully considered, but is most respectfully traversed.

The laminate of the present invention (for example, Fig. 1: "Base/A/B" (Base 1/Carboxyl group-containing polymer layer 2/Polyvalent metal compound-containing layer 3), Fig. 2: "Base/B/A/B" (Base 21/Polyvalent metal compound-containing layer 22/Carboxyl group-containing polymer layer 23/Polyvalent metal compound-containing layer 24); "Base/A/B/A"; [0086] of the corresponding US Pub. No. 2007/0059518), as recited in claim 1, has a layer structure that a carboxyl group-containing polymer layer (A) and a polyvalent metal compound-containing layer (B) are arranged adjacently to each other on at least one side of a polymeric base, wherein the polyvalent metal compound-containing layer (B) contains particles of a polyvalent metal compound, a binder resin and a surfactant. The laminate is formed with an oxygen transmission rate of no more than 1,000

cm<sup>3</sup>(STP)/(m<sup>2</sup>·day·MPa) as measured at 30°C and 0% relative humidity as well as at 30°C and 80% relative humidity ([0094]).

As recited in new claim 24, the surfactant is an ester type nonionic surfactant, or an anionic surfactant, or a surfactant having a polymer skeleton.

The present invention accelerates the migration of the polyvalent metal compound particles (in the form of polyvalent metal ion, [0089]) into the carboxyl group-containing polymer layer (A) to efficiently obtain a laminate excellent in gas barrier property ([0019]), water resistance, hot water resistance and water vapor resistance ([0093]). The migration of the polyvalent metal compound particles is accelerated by the presence of the surfactant.

For examples, as summarized in Table 1 on page 50 of the specification, Examples 1-14, a carboxyl group-containing polymer layer is formed on one side of a polymeric base, and Coating Liquid V, VI or VII containing particles of a polyvalent metal compound, a binder resin and a surfactant was further applied on to the carboxyl group-containing polymer layer and dried to form a polyvalent metal compound-containing layer. On the other hand, Comparative Examples 1-3 only have a coating liquid containing particles of the polyvalent metal compound and the binder resin, but no surfactant to form a polyvalent metal compound-containing layer. Examples 1-14 provide oxygen transmission rates as low as 10 cm<sup>3</sup>/m<sup>2</sup> · day · MPa as measured at 30°C and 80% RH after 24 hours, while Comparative Examples 1-3 provide oxygen transmission rates as high as 1,500 cm<sup>3</sup>/m<sup>2</sup> · day · MPa as measured at 30°C and 80% RH after 24 hours

Applicants respectfully contend that cited references and their combination do not teach or suggest “the polyvalent metal compound-containing layer (B) contains particles of a polyvalent metal compound, a binder resin and a surfactant” and “the laminate is formed with an oxygen transmission rate of no more than 1,000 cm<sup>3</sup>(STP)/(m<sup>2</sup>·day·MPa) as measured at 30°C and 0% relative humidity as well as at 30°C and 80% relative humidity” as in the present invention.

As admitted by the Examiner (p. 4, lines 1-2 of the outstanding Office Action), Obha does NOT teach that the metallic compound-containing layer contains a surfactant. Obha's multi-layer laminate has an oxygen transmission rate as high as 400 cm<sup>3</sup>/m<sup>2</sup> · day · atm (~3.948 cm<sup>3</sup>(STP)/(m<sup>2</sup>·day·MPa) as measured at 30°C and 80% RH after 24 hours (col. 9, lines 39-41), which is worse than those of the Comparative Examples 1-3 (1,500 cm<sup>3</sup>/m<sup>2</sup> · day · MPa) of the present specification

Matsuno was relied upon by the Examiner to provide a surfactant. However, Matsuno provides a detergent comprising a surfactant as a main component, and the detergent composition contains a specific unsaturated carboxylic acid polymer as a biodegradable builder (col. 14, lines 31-46; col. 21, lines 39-44; claims 9-10). Matsuno's crosslinked product of an unsaturated carboxylic acid copolymer is designed to provide excellent water absorption property and biodegradability (claim 1; col. 1, lines 11-21). Further, Matsuo et al. describe that "*the monomers are polymerized and the copolymer gel will be cut into pieces. Preferably, a nonionic or anionic surfactant is added to the polymerization system in order to prevent the copolymer gel pieces from fusing together or from being sticky to each other* (col. 9, lines 26-30)."

As described above, Matsuno's crosslinked product of the unsaturated carboxylic acid copolymer, is used in a powder form as a water-absorbing resin, and the detergent composition contains the specific unsaturated carboxylic acid polymer as the biodegradable builder. Matsuno is silent regarding any gas barrier property, much less about "an oxygen transmission rate of no more than  $1,000 \text{ cm}^3(\text{STP})/(\text{m}^2 \cdot \text{day} \cdot \text{MPa})$  as measured at 30°C and 0% relative humidity as well as at 30°C and 80% relative humidity" as in the present invention.

Applicants contend that one skilled in the art could not make laminate of the present invention as claimed by the Applicants based on the above prior teachings except by using Applicants' invention as a blueprint. Applicants will point out that a rejection based on hindsight knowledge of the invention at issue is improper.

Secondly, one skilled will not be motivated to combine the teachings in Obha and Matsuno in the manner suggested by the Examiner since the resulting change in the water-absorption property according to Matsuno (Abstract) will contradict Obha's intended purpose of water-resistance (col. 3, lines 49). It is well established that a rejection based on a principle that contracts the teachings of the cited references is also improper.

Even if, *arguendo*, a person of ordinary skill were motivated to combine the teachings in Obha and Matsuno, such combined teachings would still fall short in fully meeting the Applicants' claimed invention as set forth in claim 1 since, as discussed, there is no teaching of "the laminate is formed with an oxygen transmission rate of no more than  $1,000 \text{ cm}^3(\text{STP})/(\text{m}^2 \cdot \text{day} \cdot \text{MPa})$  as measured at 30°C and 0% relative humidity as well as at 30°C and 80% relative humidity" in either Obha or Matsuno.

Applicants respectfully contend that none of the cited references or their combinations teaches or suggests the features recited in the independent claim 1 as the present invention. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

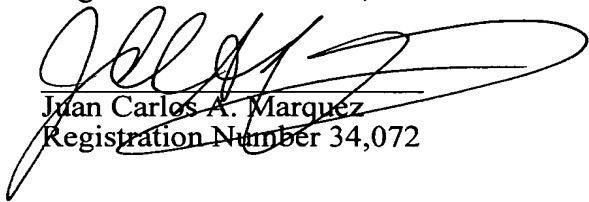
### Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

Respectfully submitted,

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